Patent claims

1. A method for setting up a communication link between two clients from a plurality of clients in a directly communicating communication network,
where
the communication link is set up by interchanging signaling information, comprising client address information, between clients which are to be involved in the communication link,
the communication link is set up directly between the clients which are to be involved in the communication link on the basis of the client address information,
characterized by
the following method steps which are performed in succession:
a) client address information which is required for setting up paired communication links between the clients is stored in distributed form in the plurality of clients,
b) a searching client transmits a broadcast request message aimed at setting up at least one communication link between a calling client and at least one sought client,
c) provided that the broadcast request message's respective functionality means that it has the transmission of a response message associated with it, which response message comprises a client address information item which is required for the at least one communication link, each client receiving the broadcast request message transmits this response message, and
d) this client address information item is used to set up the communication link between the calling client and the at least one sought client.

2. The method as claimed in patent claim 1, characterized in that in step c) a receiving client's functionality includes signaling the broadcast request message on the client and transmitting the response message when the broadcast is taken.

3. The method as claimed in patent claim 1, characterized in that a call diversion in cases in which the signaling information sent from the calling client to a called client in order to set up a first communication link is rejected or not promptly answered by the called client is made by virtue of one of the stored client address information items in step a) relating to a call diversion destination client for the called client,
the request message in step b) comprising an identifier for the called client, and
the client address information item contained in the response message in step c) being the call diversion destination client.

4. The method as claimed in patent claim 3, characterized in that the searching client in step b) is formed by the calling client.

5. The method as claimed in patent claim 3 or 4, characterized in that the response message in step c) is sent by the sought client, which forms the call diversion destination client.

6. The method as claimed in patent claim 1 or 2, characterized
in that a call made by the calling client to the searching client, which belongs to a call transfer group, is transferred by virtue of
the client address information in step a) respectively describing the clients associated with the call transfer group.

7. The method as claimed in patent claim 6, characterized
in that the broadcast request message in step b) is transmitted specifically to the further clients in the call transfer group which are described in the client address information.

8. The method as claimed in patent claim 7, characterized
in that the communication link in step d) is set up, when there are a plurality of sought clients transmitting the response message, to that sought client which transmitted the response message first.

9. The method as claimed in one of patent claims 6 to 8, so far as it refers back to patent claim 2, characterized
in that the call signaling in step c) is effected such that the clients are in a free operating state during the call signaling.

10. The method as claimed in patent claim 1 or 2, characterized
in that a group call is made by virtue of
the client address information in step a) respectively describing the clients associated with the group, and

the communication link in step d) being set up to that sought client transmitting the response message which transmitted the response message first.

11. The method as claimed in patent claim 10, characterized in that the calling client in step c) forms the searching client.

12. The method as claimed in patent claim 10 or 11, so far as it refers back to patent claim 2, characterized in that in step c) an order among the clients assigned to transmit a response message is stipulated in which the call signaling is effected on these clients in succession.

13. The method as claimed in patent claim 10 or 11, so far as it refers back to patent claim 2, characterized in that in step c) the call signaling on the clients is effected simultaneously.

14. The method as claimed in patent claim 1, characterized in that after step c) the client address information item contained in the response message is stored by the searching client in an address database associated with this searching client, and in step d) the address database is accessed in order to set up the communication link.

15. The method as claimed in patent claim 14, characterized
in that the broadcast request message in step b) comprises at least one filter criterion which is used for selecting particular clients, and
the response message is transmitted in step c) provided that the respective client contains information which meets the at least one filter criterion and/or the respective client has properties which meet the at least one filter criterion.

16. The method as claimed in patent claim 1, characterized
in that a communication link to the sought client, which is connected to a client used as a waiting destination with a waiting destination descriptor, is set up by virtue of
the waiting destination descriptor being sent to the searching client before step b),
the broadcast request message in step b) comprising the waiting destination descriptor,
the client used as waiting destination transmitting the response message in step c), and
the connection between the sought client and the client used as waiting destination being cleared down in step d).